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ABSTRACT OF THE DISCLOSURE

The invention provides a method and system for adaptive point-to-point communication between a wireless communication system and a non-wireless backhaul communication system. The wireless physical layer and the wireless media-access-control (MAC) layer collectively include a set of parameters, which are adaptively modified by base station controllers in multiple cells of the wireless communication system for intercommunication among those multiple cells. The IP layer and QoS (quality of service) parameters for communication between a selected base station controller and the non-wireless backhaul communication system collectively include a second set of parameters, which are adaptively modified by the selected base station controller for intercommunication between that selected base station controller and the non-wireless backhaul communication system. Wireless communication among multiple cells includes adaptive modification of parameters for the physical layer and the MAC layer, so as to optimize intercell communication without excessive interference with intracell communication. Thus, a first base station controller (selected for its relatively central communication position) adjusts communication with each neighbor base station controller individually and adaptively in response to changes in characteristics of communication, including physical characteristics, amount of communication traffic, and nature of application for the communication traffic. The first base station controller accounts for characteristics of communication for both intracell and intercell communication, including the possibility of interference between intracell and intercell communication. The combination of wireless

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